

JUL 31 2001

PATRICK FISHER
Clerk

PUBLISH

UNITED STATES COURT OF APPEALS
TENTH CIRCUIT

QWEST CORPORATION,

Petitioner,

v.

FEDERAL COMMUNICATIONS
COMMISSION; UNITED STATES
OF AMERICA,

Respondents,

AT&T CORP. ("AT&T"); RURAL
TELEPHONE COALITION;
VERMONT DEPARTMENT OF
PUBLIC SERVICE; STATE OF
CALIFORNIA AND THE PUBLIC
UTILITIES COMMISSION OF THE
STATE OF CALIFORNIA; THE
MAINE PUBLIC UTILITIES
COMMISSION ("MAINE"); PUERTO
RICO TELEPHONE COMPANY,
INC.; WORLDCOM, INC., formerly
known as MCI WORLDCOM, INC.;
BELL ATLANTIC-DELAWARE,
INC.; BELL ATLANTIC-
MARYLAND, INC.; BELL
ATLANTIC-NEW JERSEY, INC.;
BELL ATLANTIC-PENNSYLVANIA,
INC.; BELL ATLANTIC-VIRGINIA,
INC.; BELL ATLANTIC-
WASHINGTON, D.C., INC.; BELL
ATLANTIC-WEST VIRGINIA, INC.;
NEW YORK TELEPHONE
COMPANY; NEW ENGLAND

No. 99-9546

TELEPHONE AND TELEGRAPH
COMPANY; THE WYOMING
PUBLIC SERVICE COMMISSION;
GTE SERVICE CORPORATION,

Intervenors.

QWEST CORPORATION,

Petitioner,

v.

FEDERAL COMMUNICATIONS
COMMISSION; UNITED STATES
OF AMERICA,

Respondents,

AT&T CORP. ("AT&T"); RURAL
TELEPHONE COALITION; PUERTO
RICO TELEPHONE COMPANY,
INC.; GTE SERVICE
CORPORATION; BELL ATLANTIC-
DELAWARE, INC.; BELL
ATLANTIC-MARYLAND, INC.;
BELL ATLANTIC-NEW JERSEY,
INC.; BELL ATLANTIC-
PENNSYLVANIA, INC.; BELL
ATLANTIC-VIRGINIA, INC.; BELL
ATLANTIC-WASHINGTON, D.C.,
INC.; BELL ATLANTIC-WEST
VIRGINIA, INC.; NEW YORK
TELEPHONE COMPANY; NEW
ENGLAND TELEPHONE AND
TELEGRAPH COMPANY;
WORLDCOM, INC., formerly known
as MCI WORLDCOM, INC.,

No. 99-9547

Intervenors.

VERMONT DEPARTMENT OF
PUBLIC SERVICE; MONTANA
PUBLIC SERVICE COMMISSION;
MONTANA CONSUMER COUNSEL,

Petitioners,

v.

FEDERAL COMMUNICATIONS
COMMISSION; UNITED STATES
OF AMERICA,

Respondents,

AT&T CORP. (“AT&T”); BELL
ATLANTIC-DELAWARE, INC.;
BELL ATLANTIC-MARYLAND,
INC.; BELL ATLANTIC-NEW
JERSEY, INC.; BELL ATLANTIC-
PENNSYLVANIA, INC.; BELL
ATLANTIC-VIRGINIA, INC.; BELL
ATLANTIC-WASHINGTON, D.C.,
INC.; BELL ATLANTIC-WEST
VIRGINIA, INC.; NEW YORK
TELEPHONE COMPANY; NEW
ENGLAND TELEPHONE AND
TELEGRAPH COMPANY; QWEST
CORPORATION,

No. 00-9505

Intervenors.

**Petitions for Review of Orders of the
Federal Communications Commission
(CC Docket No. 96-45)**

Matthew A. Brill of Wilmer, Cutler & Pickering, Washington, D.C. (John H. Harwood II, William R. Richardson, Jr., Francesca Bignami of Wilmer, Cutler & Pickering, Washington, D.C.; Robert B. McKenna of Qwest Corporation, Denver, Colorado; Steven R. Beck of Qwest Corporation, Washington, D.C., with him on the briefs) for Petitioner Qwest Corporation.

Elisabeth H. Ross of Birch, Horton, Bittner and Cherot, Washington, D.C. (Douglas S. Burdin, Allison M. Ellis of Birch, Horton, Bittner and Cherot, Washington, D.C.; John Sayles of Vermont Department of Public Service, Montpelier, Vermont; Martin Jacobson of Montana Public Service Commission, Helena, Montana; Robert A. Nelson, Thomas S. Muri of Montana Consumer Counsel, Helena, Montana, with her on the briefs) for Petitioners Vermont Department of Public Service et al.

James M. Carr, Counsel (Christopher J. Wright, General Counsel, John E. Ingle, Deputy Associate General Counsel, Lisa S. Gelb, Counsel, with him on the brief), Federal Communications Commission, Washington, D.C., for Respondent Federal Communications Commission.

Gene S. Schaerr of Sidley & Austin, Washington, D.C. (David L. Lawson, James P. Young, Christopher T. Shenk of Sidley & Austin, Washington, D.C.; Mark C. Rosenblum, Peter H. Jacoby, Judy Sello of AT&T Corp., Basking Ridge, New Jersey; Thomas F. O'Neil III, William Single, IV of WorldCom, Inc., Washington, D.C., with him on the brief) for Intervenor AT&T Corp. et al.

Elisabeth H. Ross of Birch, Horton, Bittner and Cherot, Washington, D.C. (Douglas S. Burdin, Allison M. Ellis of Birch, Horton, Bittner and Cherot, Washington, D.C.; John Sayles of Vermont Department of Public Service, Montpelier, Vermont; Joel B. Shifman of Maine Public Utilities Commission, Augusta, Maine, with her on the brief) for Intervenor Vermont Department of Public Service et al.

Before **EBEL**, **BALDOCK** and **KELLY**, Circuit Judges.

EBEL, Circuit Judge.

Agencies play an important role in rational governance because they develop expertise in specialized areas. Principles of checks and balances, however, demand that agencies provide full explanation for their actions to enable effective judicial review.

In the cases before us, we reverse and remand the Ninth Order of the Federal Communications Commission (FCC) because it does not provide sufficient reasoning or record evidence to support its reasonableness. The order established a federal funding mechanism to support universal telecommunications services in high-cost areas. The consolidated petitions for review challenge the sufficiency of this funding mechanism in view of certain statutory principles, such as achieving reasonably comparable rates for basic telephone services in rural and urban areas. We do not decide the underlying issue of whether the funding is in fact sufficient; rather, we conclude that the FCC has not supported why the funding is sufficient. In particular, the FCC did not (1) define key statutory terms adequately; (2) set forth a rational basis for the particular benchmark it selected; (3) adequately induce state mechanisms to support universal service; or (4) explain how this piece of federal support for universal service relates to other funding mechanisms. In this posture, we must reverse and remand the Ninth Order for further agency proceedings.

We review and uphold the FCC’s computer model of the costs of providing service in a given area. Several technical aspects of the model have been challenged, but we find that these fall squarely within the FCC’s discretion as an expert agency. None of the alleged problems undermine the utility of the model for estimating costs. We also uphold the FCC’s practice of fixing minor errors in the computer model without full notice-and-comment procedures. Accordingly, we affirm the Tenth Order.

BACKGROUND

A. Introduction

The goal of universal service is that “customers in all regions of the nation have access to telecommunications services.” Ninth Report & Order and Eighteenth Order on Reconsideration ¶ 1, FCC 99-306, CC Docket No. 96-45 (Nov. 2, 1999) [hereinafter Ninth Order]. Universal service is “an evolving level of telecommunications services” considering such factors as whether a service has, “through the operation of market choices by customers, been subscribed to by a substantial majority of residential customers.” 47 U.S.C. § 254(c)(1). It comprises, among other things, local telephone service and access to emergency, directory-assistance, and long-distance services. See 47 C.F.R. § 54.101(a).

The cost of providing these services to customers varies widely. For example, it is generally more expensive for a telephone company to provide service in a rural area, where customers are dispersed, than it is to provide the same service in an urban area, where customers are more concentrated. Ninth Order ¶ 15. To address this disparity, states and the federal government have established policies that support access to basic services in high-cost areas. Id. ¶¶ 13, 15.

When the local telephone markets were regulated monopolies, these policies relied on a combination of explicit monetary payments to local phone companies and implicit subsidies through rate designs. Id. ¶ 12. For example, many states set uniform rates throughout a company's service area, which enabled the company to charge above-cost rates in urban areas to support below-cost rates in rural areas. Id. ¶ 15. Similarly, the federal interstate access charge system was designed to subsidize local service through long-distance rates. Id. These implicit subsidies are suited to a monopoly environment, but become difficult to sustain as competition increases. Id. ¶ 16.

B. Telecommunications Act of 1996

The Telecommunications Act of 1996 sought to introduce competition to local telephone markets. See Telecommunications Act of 1996 § 101, Pub. L. No.

104-104, 110 Stat. 56, 61-80 (codified as amended at 47 U.S.C. §§ 251-261). At the same time, however, Congress codified its continued commitment to preserving universal service. See 47 U.S.C. § 254. Several provisions of § 254 are relevant to this case.

The Act established a Federal-State Joint Board to recommend changes to the federal regulations on universal service, which the FCC then implements in its own proceedings. See 47 U.S.C. § 254(a). The Joint Board and the FCC must base their policies on seven enumerated principles. Id. § 254(b). The two principles directly relevant to this case are that (1) consumers in “rural, insular, and high cost areas” should have access to services that are “reasonably comparable” to those provided in urban areas at “reasonably comparable” rates, id. § 254(b)(3), and (2) “[t]here should be specific, predictable and sufficient Federal and State mechanisms to preserve and advance universal service,” id. § 254(b)(5).

Every company that provides interstate telecommunications services must contribute to the federal universal-service mechanisms. Id. § 254(d). Federal funding should be “explicit and sufficient to achieve the purposes of” universal service. Id. § 254(e).

C. FCC Orders

The FCC attempted to implement these provisions in its Report and Order, FCC 97-157, CC Docket No. 96-45 (as amended June 4, 1997) [hereinafter First Order], which on review was affirmed in part, reversed in part, and remanded in part by the Fifth Circuit. Texas Office of Pub. Util. Counsel (TOPUC) v. FCC, 183 F.3d 393 (5th Cir. 1999), cert. dismissed sub nom. GTE Serv. Corp. v. FCC, 121 S. Ct. 423 (2000). Since then, the FCC has received further recommendations from the Joint Board and has reconsidered and refined its policies in a series of orders. This case involves challenges to the Ninth and Tenth Orders, released on the same date. See Ninth Order; Tenth Report and Order, FCC 99-304, CC Docket Nos. 96-45, 97-160 (Nov. 2, 1999) [hereinafter Tenth Order].

The orders at issue in this case concern universal service support for non-rural carriers only. “Rural carriers,” discussed more fully below, are carriers that serve only rural areas or that are small in size. See infra section II.B.4. Non-rural carriers such as Qwest are larger and serve at least some urban areas. For rural carriers, the FCC has recently adopted an interim funding mechanism for the next five years and continues to develop a long-term plan. See Fourteenth Report and Order, Twenty-Second Order on Reconsideration, and Further Notice of Proposed Rulemaking, CC Docket Nos. 96-45, 00-256 ¶ 1 (May 23, 2001) [hereinafter Fourteenth Order].

1. Pre-Ninth Order

The challenges by the petitioners concern whether the FCC has provided sufficient funding to meet the statute's principle that rates and services for universal services be "reasonably comparable." Before the Ninth Order, the FCC had established several aspects of its universal service policy. First, states would "bear the responsibility to marshal state and federal support resources to achieve reasonable comparability of rates." Seventh Report & Order and Thirteenth Order on Reconsideration ¶ 31, FCC 99-119, CC Docket Nos. 96-45, 96-262 (May 28, 1999) [hereinafter Seventh Order].¹ Second, the federal mechanism would not consider rates directly; rather, it would use costs "as an indicator of a state's ability to maintain reasonable comparability of rates within the state and relative to other states . . . because rates are generally based on costs." Id. ¶ 32.² Finally, funding would be available in areas where the average cost of providing service exceeded some national benchmark defined in terms of the average cost across the nation. Id. ¶ 31.

¹The FCC informs us that there are no pending petitions for review of the Seventh Order. To the extent we address matters from the Seventh Order in this case, it is because they are inextricably linked to the Ninth Order. Cf. discussion infra part III (rejecting a challenge to our ability to review the Tenth Order on similar grounds).

²Petitioners do not challenge the use of costs as a proxy for rates, and we express no opinion on this.

The FCC also had begun developing an algorithm to estimate the costs of providing service, which is available in the form of a computer program on the FCC’s web site. See Fifth Report & Order ¶ 92, FCC 98-279, CC Docket Nos. 96-45, 97-160 (Oct. 28, 1998) [hereinafter Fifth Order]. In the Fifth Order, the FCC adopted a model platform, which determined “aspects of the model that are essentially fixed,” such as assumptions about soil and terrain. Id. ¶ 2. It did not select “inputs” for the model, such as the cost of cables and switches. Id.

2. Ninth Order

In the Ninth Order, the FCC finalized its federal funding mechanism. To determine the amount of money that a state may receive, the FCC employs a two-part method. First, using its cost model, it set a benchmark at 135% of the national average cost per line.³ Ninth Order ¶ 55. Second, it computes the average cost per line within a given state. Id. ¶ 45. If the statewide average cost exceeds the benchmark, then the FCC provides funding for costs in excess of the benchmark.⁴ Id. ¶ 42. Once the FCC determines a state’s level of support, it

³This average, like the statewide average discussed below, is of lines served by non-rural carriers only. Ninth Order ¶¶ 45 n.136, 55. Thus, it is somewhat inaccurate to refer to these averages as the “national average” and “statewide average,” as do Petitioners. For simplicity’s sake, however, we adopt the same shorthand.

⁴Currently, this mechanism provides support only for 76% of costs
(continued...)

generally distributes the money directly to carriers. The funding is targeted based on the costs at the wire-center level, with each carrier receiving its proportionate share, although a state may ask that the targeting rules be waived. Id. ¶¶ 73, 76. The state must certify that a carrier is using the funding appropriately. Id. ¶ 95.

The FCC found that this methodology would implement its goal of “enabl[ing] states to ensure the reasonable comparability of non-rural carriers’ intrastate rates.” Id. ¶ 6 (emphasis added). It reiterated that the states “have the primary responsibility for ensuring reasonable comparability of rates within their borders. The federal mechanism leaves this state role intact, but provides support to carriers in states with average costs substantially in excess of the national average.” Id. ¶ 46.

3. Tenth Order

In the Tenth Order, the FCC selected input values for its cost model, thereby completing the model. Tenth Order ¶ 2. The FCC found that the model

⁴(...continued)
exceeding the benchmark, because interstate access rates already subsidize on average 24% of these costs. Ninth Order ¶ 63. The FCC noted that because the 24% is an average, limiting support to 76% of costs may cause some areas to receive more or less than 100% of costs above the benchmark. Id. ¶ 63 n.191. Nonetheless, it concluded that the administrative burden of computing the percentage in each case would outweigh the benefits of a more accurate accounting. Id. Petitioners do not challenge this determination.

provides reasonably accurate estimates of costs. Id. ¶ 23. The FCC anticipates updating the model as technology and other conditions change. Id. ¶ 28. In addition, the FCC has delegated to the Common Carrier Bureau the authority to make changes to the model “as necessary and appropriate to ensure that the platform of the federal mechanism operates as described in” the orders. Id. ¶ 20.

D. Petitions for Review

We have consolidated three petitions for review filed against the Ninth and Tenth Orders. In No. 99-9546, Qwest challenges several aspects of the Ninth Order. In particular, Qwest argues that (1) the FCC must itself provide full funding for universal services instead of relying on the states to take action; (2) the use of statewide averages and a benchmark set at 135% of the national average do not satisfy the principle that rates in rural and urban areas be reasonably comparable or that federal funding be sufficient to achieve the purposes of the Act; and (3) the FCC failed to explain adequately its decisions. In No. 00-9505, the States of Vermont and Montana argue that (1) the combination of a national average and a 135% benchmark provides too little funding and (2) the FCC failed to make adequate factual findings to justify its

funding mechanism.⁵ In No. 99-9547, Qwest attacks the model finalized in the Tenth Order as violating the Administrative Procedure Act and the Telecommunications Act. The Wyoming Public Service Commission filed a Notice of Joinder in Qwest's brief. Other parties, including Vermont, Maine, and AT&T, have intervened to defend some or all of the FCC's decisions.

DISCUSSION

I. Jurisdiction and Standard of Review

We have jurisdiction to review final orders of the FCC under 28 U.S.C. § 2342(1). Our task is to determine whether the FCC's orders are "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A). To meet this standard, "the agency must examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made." Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983).

If the agency has failed to provide a reasoned explanation for its action, or if limitations in the administrative record make it impossible to conclude the action was the product of reasoned decisionmaking, the reviewing court may supplement the record or

⁵The Vermont and Montana petition was originally filed in the United States Court of Appeals for the District of Columbia. It was transferred to this court under 28 U.S.C. § 2112(a).

remand the case to the agency for further proceedings. It may not simply affirm.

Olenhouse v. Commodity Credit Corp., 42 F.3d 1560, 1575 (10th Cir. 1994)

(citation omitted).

When it appears that Congress delegated lawmaking authority to an agency, we review the agency's statutory interpretation promulgated in the exercise of that authority under the two steps set out in Chevron U.S.A. v. NRDC, 467 U.S. 837 (1984). See United States v. Mead Corp., 121 S. Ct. 2164, 2171 (2001). If the statute is clear, we apply its plain meaning. Chevron, 467 U.S. at 843. If it is silent or ambiguous, however, we apply the agency's construction so long as it is a reasonable interpretation of the statute. Id. at 843-44.

II. Challenges to the Ninth Order

A. Statutory Language

Both sets of Petitioners argue that the Ninth Order does not provide enough money to support universal service. They assert this level of support will not achieve the statutory principle of providing sufficient support such that rates in rural and urban areas are reasonably comparable. The FCC denies that § 254(b) imposes such a duty. We begin by examining the relevant statutory provisions.

1. Section 254(b)

Section 254(b) provides that the FCC “shall” base its universal-service policies on a number of listed principles. Two of these principles are relevant to this case:

(3) Access in rural and high cost areas

Consumers in all regions of the Nation, including low-income consumers and those in rural, insular, and high cost areas, should have access to telecommunications and information services, including interexchange services and advanced telecommunications and information services, that are reasonably comparable to those services provided in urban areas and that are available at rates that are reasonably comparable to rates charged for similar services in urban areas.

. . . .

(5) Specific and predictable support mechanisms

There should be specific, predictable and sufficient Federal and State mechanisms to preserve and advance universal service.

The FCC may balance the principles against one another, but must work to achieve each one unless there is a direct conflict between it and either another listed principle or some other obligation or limitation on the FCC’s authority. Cf. Alenco Communications v. FCC, 201 F.3d 608, 621 (5th Cir. 2000) (noting that the FCC may ignore a listed principle “[t]o satisfy a countervailing statutory

principle”).⁶ We reach this conclusion by using basic principles of statutory interpretation.

The plain text of the statute mandates that the FCC “shall” base its universal policies on the principles listed in § 254(b). This language indicates a mandatory duty on the FCC. See Forest Guardians v. Babbitt, 174 F.3d 1178, 1187 (10th Cir. 1999). However, each of the principles in § 254(b) internally is phrased in terms of “should.” The term “should” indicates a recommended course of action, but does not itself imply the obligation associated with “shall.” See United States v. Maria, 186 F.3d 65, 70 (2d Cir. 1999) (citing Webster’s Third New International Dictionary 2085, 2104 (1st ed. 1993), and Black’s Law Dictionary 1375, 1379 (6th ed. 1990)). Thus, the FCC must base its policies on the principles, but any particular principle can be trumped in the appropriate case. We hold the FCC may exercise its discretion to balance the principles against one another when they conflict, but may not depart from them altogether to achieve some other goal.

⁶There is some language in an earlier Fifth Circuit case arguably suggesting an even weaker reading of the § 254(b) principles. See TOPUC, 183 F.3d at 421 (noting that the list of principles “hardly constitutes a series of specific statutory commands”). TOPUC holds only that the principles may be overcome by the limitations of the FCC’s jurisdiction under § 152(b), however. This is consistent both with our analysis above and with the Alenco opinion. See also id. at 434 (noting that the FCC’s discretion “is not absolute”).

The FCC and AT&T suggest that the goal of limiting federal expenditures provides a competing principle. Cf. Alenco, 201 F.3d at 620 (“[E]xcessive funding may itself violate the sufficiency requirements of the Act. . . . [E]xcess subsidization in some cases may detract from universal service by causing rates unnecessarily to rise, thereby pricing some consumers out of the market.”).

Arguably § 254(b)(1) encompasses the principle that long-distance services, as well as universal services, should be kept affordable, and thus excessive subsidization of universal services by long distance may violate the principle found in § 254(b)(1). However, at most that means that the principles of universal service have to be balanced against the burden on long distance of providing contributions toward universal service.⁷

The FCC also contends that it can have no duty to ensure the reasonable comparability of rural and urban rates because it lacks ultimate jurisdiction to set those rates. See 47 U.S.C. § 152(b); Ninth Order ¶ 37 (“Congress would not have imposed on the Commission obligations regarding intrastate rates that the Commission does not have the legal authority to effectuate.”). This argument misconstrues the nature of the FCC’s duty under § 254(b). The FCC may not have jurisdiction with respect to intrastate rates, but it is nevertheless obligated to

⁷Of course, the FCC and Joint Board could adopt this as an explicit principle under § 254(b)(7), but to date they have not done so.

formulate its policies so as to achieve the goal of reasonable comparability by inducing “sufficient . . . State mechanisms” to do so. We explain this further below, in Section II.B.3.

2. Section 254(e)

The other relevant provision of the Act is § 254(e), which provides in part that any federal support for universal service “should be explicit and sufficient to achieve the purposes of this section.” The Fifth Circuit held that “the plain language of § 254(e) makes sufficiency of universal service support a direct statutory command.” TOPUC, 183 F.3d at 412; see also id. at 425. This holding has been criticized (cogently, we think) for overstating the force of the word “should.” See Comsat Corp. v. FCC, 250 F.3d 931, 940 (5th Cir. 2001) (Pogue, J., concurring). We need not decide in this case whether to reject the Fifth Circuit’s interpretation, however. Even assuming § 254(e) sets forth a principle that can be overcome by competing statutory concerns rather than an absolute command, we ultimately conclude the FCC has not explained how its funding mechanism is sufficient.

B. Problems with the Ninth Order

For the reasons set forth below, we hold the FCC has not “articulate[d] a satisfactory explanation” for its decisions, Motor Vehicle Mfrs. Ass’n, 463 U.S. at 43, that would enable us to review the rationality of the Ninth Order. As we indicated in Olenhouse, when “the agency has failed to provide a reasoned explanation for its action,” it is appropriate to remand to the agency for further proceedings. 42 F.3d at 1575. We do so here to allow the FCC to establish an adequate legal and factual basis for the Ninth Order and, if necessary, to reconsider the operative mechanism promulgated in that Order.

We find four significant problems with the Ninth Order: (1) The FCC did not define adequately key terms including “reasonably comparable” and “sufficient”; (2) it did not sufficiently justify setting the funding benchmark at 135% of the national average; (3) it did not provide any inducements for the state mechanisms that it concedes are necessary to implement universal service; and (4) it did not explain how this funding mechanism will interact with other universal-service programs.

1. Failure To Define Key Terms Adequately

One of the main points of contention in this case is whether the FCC has endeavored to ensure that rates in rural and urban areas for universal services are

reasonably comparable. The FCC’s definition of “reasonably comparable” is inadequate: “a fair range of urban/rural rates both within a state’s borders, and among states nationwide.” Seventh Order ¶ 30; Ninth Order ¶ 54.⁸ This definition does not help answer the questions that arise about reasonable comparability. For example, Vermont and Montana assert that some rural rates will be 70-80% higher than urban rates under the FCC’s funding mechanism. We fail to see how the FCC’s definition of “reasonably comparable” illuminates this dispute. Does the FCC contend, for example, that a 70-80% discrepancy is within a “fair range” of rates? We doubt that the statutory principle of “reasonabl[e] comparab[ility]” can be stretched that far.

At least twice, the FCC has provided what purport to be further definitions of “reasonably comparable”: (1) “[S]upport levels must be sufficient to prevent pressure from high costs and the development of competition from causing unreasonable increases in rates above current, affordable levels.” Seventh Order ¶ 30. (2) “[S]ome reasonable level above the national average forward-looking cost per line.” Ninth Order ¶ 54. Even if these definitions were more precise than the first one given (which we doubt), we do not believe they can be

⁸At oral argument, counsel for the FCC also stated that the Commission had not defined the terms “rural area” and “urban area.” This appears to be only partly correct. “Rural area” is defined by regulation in 47 C.F.R. § 54.5. We are not aware of any comparable definition of “urban area” and express no opinion as to whether “urban” means “non-rural” in this context.

considered reasonable interpretations of the statutory language. The Act calls for reasonable comparability between rural and urban rates; these definitions simply substitute different standards.

The FCC also has not defined what it means for federal support for universal service to be “sufficient.” It simply asserted without explanation that the mechanism it chose would be sufficient. See Ninth Order ¶ 56. This conclusory statement is inadequate to enable appellate review of the sufficiency of the federal mechanism and, if accepted, would provide only a circular argument in support of the FCC’s position.

Assuming that the terms “reasonably comparable” and “sufficient” are ambiguous, we would be obligated under Chevron to defer to the FCC’s definitions if they were reasonable constructions of the statute. When the FCC has failed to define the terms at all or has provided a definition that replaces a statutory command with some other standard, however, deference is inappropriate. Without a “limiting standard, rationally related to the goals of the Act,” AT&T Corp. v. Iowa Utils. Bd., 525 U.S. 366, 388 (1999), we are unable to conclude that the FCC’s actions are rational. On remand, we require the FCC to define these terms more precisely in a way that can be reasonably related to the statutory principles, and then to assess whether its funding mechanism will be sufficient for the principle of making rural and urban rates reasonably comparable.

2. Failure To Justify 135% Benchmark

In a related vein, the FCC has failed to explain how its 135% benchmark will help achieve the goal of reasonable comparability or sufficiency. As noted above, the FCC has substituted a comparison of national and statewide averages for the statutory comparison of urban and rural rates. If, however, the FCC's 135% benchmark actually produced urban and rural rates that were reasonably comparable, however those terms are defined, we likely would uphold the mechanism.⁹ Various parties submitted information to the FCC during the proceedings below comparing rural and urban costs under the FCC's proposal. There is no record of the FCC's evaluation of this data; it apparently adopted the benchmark without explicit empirical findings in this regard. See Ninth Order ¶ 54. Indeed, the agency may very well have a difficult time making such findings because, as explained in the next section, it has no assurances that the states will do anything to support universal service.

The FCC gave four justifications for setting the benchmark at 135%: (1) It “falls within the range recommended by the Joint Board,” 115-150%; (2) such a level is “consistent with the precedent of the existing support mechanism,” which uses a range of 115-160%; (3) that level is “near the midpoint” of the current

⁹We therefore reject Qwest's argument that the use of statewide and national averages is necessarily inconsistent with § 254.

range; and (4) it is a “reasonable compromise of commenters’ proposals.” Ninth Order ¶ 55. We find these justifications insufficient to support the benchmark. The FCC is not a mediator whose job is to pick the “midpoint” of a range or to come to a “reasonable compromise” among competing positions. As an expert agency, its job is to make rational and informed decisions on the record before it in order to achieve the principles set by Congress. Merely identifying some range and then picking a compromise figure is not rational decision-making.

We recognize that the FCC’s determination of a benchmark will necessarily be somewhat arbitrary. That recognition might justify arbitrarily picking a point within a narrow range, but does not justify doing so in the wide range present here. We also acknowledge that the agency is entitled to deference in its line-drawing when it makes a reasoned decision. Here, however, the FCC has not established that it made an informed and rational choice. The Ninth Order contains conclusory statements that a 135% benchmark will “provide sufficient support to enable reasonably comparable rates,” Ninth Order ¶ 56, but does not reference any of the data on rural and urban averages that the states presented to the agency and before us. On remand, the FCC should address the relevant data and provide adequate record support and reasoning for whatever level of support it ultimately selects upon remand.

3. Lack of State Inducements

The FCC acknowledges that the Ninth Order will result in reasonably comparable rates only if the states implement their own universal-service policies. E.g., Ninth Order ¶ 56 (“We believe that this level of [federal] support will provide states with the ability to provide for a ‘fair range’ of urban and rural rates within their borders . . .”). Yet there is nothing in the Ninth Order to induce such state mechanisms, and there is nothing in the Order requiring such inducements in the future if the states fail to provide for reasonable comparability between urban and rural rates as required by the statute. To the contrary, the Ninth Order expressly adopts the Joint Board’s recommendation that the FCC “abstain from requiring any state action as a condition for receiving federal high-cost universal service support” other than the certifications required by § 254(e).¹⁰ Ninth Order ¶ 67 (emphasis added).¹¹ As noted above, the Act requires the FCC to base its policies on the principle that there should be sufficient state mechanisms to promote universal service. Thus, the FCC must ensure that these mechanisms exist.

¹⁰This certification process is insufficient to meet our concerns. It requires only that the state certify that the carrier is eligible to receive the federal funds and that the funds are being used for universal service as intended. See Ninth Order ¶¶ 93-110.

¹¹At oral argument, counsel for the FCC conceded that there were no mechanisms in place to induce state action.

We recognize that the FCC may not be able to implement universal service by itself, since it lacks jurisdiction over intrastate service. See 47 U.S.C. § 152(b). Indeed, the Fifth Circuit has held that the FCC may not consider intrastate revenues in assessing a carrier's contribution to the federal universal-service support mechanism. TOPUC, 183 F.3d at 447-48. It would be impossible for the FCC alone to ensure reasonably comparable rates in urban and rural areas unless it were willing to commit massive federal support toward ensuring that rates in rural areas are no higher than those currently in place in urban areas.

The Telecommunications Act plainly contemplates a partnership between the federal and state governments to support universal service. See, e.g., § 254(b)(5) (“There should be specific, predictable and sufficient Federal and State mechanisms to preserve and advance universal service.”); § 254(f) (“Every telecommunications carrier that provides intrastate telecommunications services shall contribute, on an equitable and nondiscriminatory basis, in a manner determined by the State to the preservation and advancement of universal service in that State.”); § 254(k) (placing complementary duties on the FCC and the states “to ensure that services included in the definition of universal service bear no more than a reasonable share of the joint and common costs of facilities used to provide those services.”); see also TOPUC, 183 F.3d at 424 (“[T]here is substantial support in the statute for a dual regulatory structure in the

administration of the universal service program.”). Thus, it is appropriate – even necessary – for the FCC to rely on state action in this area. We therefore reject Qwest’s argument that the FCC alone must support the full costs of universal service. Although § 254(e) requires federal support to be explicit and § 254(k) prevents carriers from using non-competitive services to provide implicit subsidies for competitive services, we see nothing in § 254 requiring the FCC broadly to replace implicit support previously provided by the states with explicit federal support.¹²

Nevertheless, the FCC may not simply assume that the states will act on their own to preserve and advance universal service. It remains obligated to create some inducement – a “carrot” or a “stick,” for example, or simply a binding cooperative agreement with the states – for the states to assist in implementing the goals of universal service. For example, the FCC might condition a state’s receipt of federal funds upon the development of an adequate state program, an approach the FCC at oral argument conceded was possible. The FCC’s fundamental error is in concerning itself only with “enabl[ing] reasonable comparability among states.” Ninth Order ¶ 38. But § 254 requires a comparison of rural and urban areas, not states. The FCC wishes to take credit for the states’

¹²Qwest also notes that some states will need more extensive programs than others to ensure reasonably comparable urban and rural rates. We see nothing problematic about this.

actions in achieving reasonable comparability, but to do so it must also undertake the responsibility to ensure that the states act. On remand, the FCC is required to develop mechanisms to induce adequate state action.

4. Lack of Information About the Full Extent of Federal Support

The orders challenged in this case concern only a piece of federal support for universal service. As noted above, they do not address funding for “rural carriers,” which will be covered by later orders. See Ninth Order ¶ 11. The Act defines “rural carriers” as

a local exchange carrier operating entity to the extent that such entity—

- (A) provides common carrier service to any local exchange carrier study area that does not include either—
 - (i) any incorporated place of 10,000 inhabitants or more, or any part thereof, based on the most recently available population statistics of the Bureau of the Census; or
 - (ii) any territory, incorporated or unincorporated, included in an urbanized area, as defined by the Bureau of Census as of August 10, 1993;
- (B) provides telephone exchange service, including exchange access, to fewer than 50,000 access lines;
- (C) provides telephone exchange service to any local exchange carrier study area with fewer than 100,000 access lines; or
- (D) has less than 15 percent of its access lines in communities of more than 50,000 on February 8, 1996.

47 U.S.C. § 153(37). In short, a rural carrier is one that serves rural, sparsely populated areas or that is small in size. Because the FCC has reserved the

possibility of applying a different funding mechanism for rural carriers than for non-rural carriers, we cannot yet properly assess the total level of federal support for universal service to ensure “sufficiency.”¹³ According to FCC Commissioner Furchtgott-Roth, dissenting from the Ninth Order, support for universal service historically has been targeted mostly at rural carriers. Commissioner Furchtgott-Roth argued that the Ninth Order “substantially increased” the funding for non-rural carriers, and he feared that no money would be left for rural carriers.

In addition, the present orders deal with reforming explicit federal support. The FCC intends to address the implicit federal support built into interstate access charges in a separate order. See Ninth Order ¶ 2 n.9. In a later order, the FCC adopted a proposal to remove \$650 million in implicit universal service support from access charges and to replace it with an explicit mechanism of the same size. See Sixth Report and Order, Report and Order, Eleventh Report and Order, CC Docket Nos. 96-262, 94-1, 99-249, 96-45, ¶ 30 (May 31, 2000) [hereinafter Eleventh Order].

We do not necessarily require the FCC to resolve finally all of these issues at once. At this stage, however, we do not know the full extent of federal support

¹³Indeed, a Rural Task Force has recommended to the Joint Board that the Tenth Order’s computer model not be extended to cover rural carriers. Rural Task Force Recommendation to the Federal-State Joint Board on Universal Service at 18, CC Docket No. 96-45 (Sept. 29, 2000).

for universal service. This makes our task of reviewing the sufficiency of the FCC's actions considerably more difficult. At the very least, we cannot say that the FCC has shown that it is providing sufficient support for universal service. On remand, the FCC will have an opportunity to explain further its complete plan for supporting universal service.

5. Conclusion

The FCC has not provided an adequate basis for us to review the rationality of the Ninth Order. It has not explained or supported its decisions adequately and therefore has acted arbitrarily and not in accordance with § 254. We therefore must reverse the order and remand for further proceedings.

Because we remand for further consideration, we need not address at this stage Petitioners' contention that the actual level of federal funding is too low to be "sufficient" to support universal service. Petitioners also assert that the Ninth Order represents an unjustified change in FCC policy, cf. Motor Vehicle Mfrs. Ass'n, 463 U.S. at 57 ("[A]n agency changing its course must supply a reasoned analysis"), and that the FCC ignored various concerns raised during the administrative process, cf. id. at 43 ("[A]n agency rule would be arbitrary and capricious if the agency . . . entirely failed to consider an important aspect of the problem"). These issues may become moot upon remand when the FCC provides

further explanation for its decisions. If they do not become moot, Petitioners may re-assert them in a later appeal to this court.

III. Challenges to the Tenth Order

Qwest challenges the cost model finalized in the Tenth Order, asserting that it was written in an obsolete computer language (Turbo Pascal), produces inaccurate computations, and has been changed without adequate notice-and-comment periods. As a preliminary matter, the FCC and AT&T assert that this challenge is not properly before us since Qwest did not petition for review of the Fifth Order, which selected the platform. We disagree.

While a petition from an agency order cannot be filed after the statutory period for filing has run, it may be that some of the issues that might have been raised in that appeal are so inextricably linked to a subsequent agency opinion on another aspect of the same case, that those issues may be raised in a timely appeal from the second opinion.

Kansas Cities v. FERC, 723 F.2d 82, 85-86 (D.C. Cir. 1983) (Scalia, J.) (emphasis omitted). Thus, in Kansas Cities, the court reviewed such an issue, noting in particular that the earlier order had left it unclear what effect it would have on the petitioners. Id. at 86. Likewise, before Qwest knew the input values, which were adopted in the Tenth Order, it could not use the model to calculate costs accurately. Therefore, Qwest could not have determined whether the model benefitted or harmed its interests. Like the Kansas Cities court, we see no reason

to require a party to petition for review of an agency action before it can know whether it will be damaged by the action.

In addition, the Fifth Order clearly stated that its implementation plan would not be finalized until it had taken other steps, including selecting the input values. Fifth Order ¶ 2. We do not see the Fifth Order as a final agency action, because it does not “mark the consummation of the agency’s decisionmaking process,” but rather is of an “interlocutory nature.” Bennett v. Spear, 520 U.S. 154, 178 (1997) (quotation marks omitted). We therefore consider the merits of Qwest’s challenge and uphold the Tenth Order.

“[B]ecause agency ratemaking is far from an exact science and involves policy determinations in which the agency is acknowledged to have expertise, courts are particularly deferential when reviewing ratemaking orders.”

Southwestern Bell Tel. Co. v. FCC, 168 F.3d 1344, 1352 (D.C. Cir. 1999)

(quotation marks omitted). The computer model of costs at issue in the Tenth Order is in the nature of rate-making and deserves strong deference to agency expertise for the same reasons. Absent the most unusual circumstances, the FCC is far better situated than is this court to decide basic technical specifications, such as choosing an appropriate computer language for its model. While Qwest

takes issue with the choice of Turbo Pascal, it has not convinced us that this choice was so manifestly unreasonable as to be unlawful.¹⁴

Similarly, while Qwest notes analytic problems with some of the subroutines in the model,¹⁵ it has not presented any evidence that the model overall produces such inaccurate results that it cannot form the basis of rational decision-making. The model is meant to estimate the costs of providing service. See Tenth Order ¶ 17. It need not reflect physical reality in all aspects if it produces “reasonably accurate estimates,” as the FCC has found it does. Id. ¶ 23. Indeed, the FCC cites the outcome of a study showing that the model’s results are “highly correlated” with dispersion of customers, and lists several factors that can explain most of the differences between the model’s estimates and actual book-cost data. Id. ¶¶ 25, 27.

Finally, the FCC is not required to begin a new notice-and-comment period every time it fixes a technical bug in its computer program. Cf. International Union, UAW v. OSHA, 938 F.2d 1310, 1325 (D.C. Cir. 1991) (finding that technical corrections did not trigger a notice-and-comment requirement of the Occupational Safety and Health Act). The Fifth Order authorizes such changes as

¹⁴We note that the FCC has translated the model into the Delphi computer language and is currently seeking comments on whether to use the Delphi model rather than the Turbo Pascal model. See Notice, 66 Fed. Reg. 34447 (June 28, 2001).

¹⁵The parties dispute whether all of these problems have yet been fixed.

are “necessary and appropriate to ensure that the platform of the federal mechanism operates as described in this Order.” Fifth Order ¶ 13. As we understand this, the changes made do not require the FCC actually to amend the Fifth or Tenth Orders. Qwest does not appear to dispute that the changes made were necessary to bring the model into compliance with these Orders. It therefore has not shown any violation of administrative law.

The D.C. Circuit’s recent opinion in Utility Solid Waste Activities Group v. EPA, 236 F.3d 749 (D.C. Cir. 2001), is not to the contrary. That case invalidated the EPA’s “minor technical amendments” to a published regulation because the agency had not followed the usual notice-and-comment procedures or justified its actions as falling within a statutory exception to the notice-and-comment requirement. Id. at 752-53. Here, by contrast, the FCC has not actually amended a published regulation; it has simply fixed its computer program to bring it into compliance with the regulation. Cf. id. (distinguishing a case in which the agency corrected an earlier mistake by issuing a binding memorandum instructing those charged with enforcing the regulation to forbear applying it in certain cases). Utility Solid Waste Activities Group is therefore inapposite to our decision.

In sum, we see no reason to disturb the Tenth Order.

CONCLUSION

In Nos. 99-9546 and 00-9505, we GRANT the petitions for review, REVERSE the Ninth Order, and REMAND to the FCC for further proceedings consistent with this opinion. In No. 99-9547, we DENY the petition for review and AFFIRM the Tenth Order.